REMARKS

Reconsideration of the rejection of Claims 1-28 under 35 U.S.C. § 112, ¶2, which rejection is traversed, is requested in light of the above non-limiting amendments and following comments.

With regard to Claims 1 and 3, there is nothing ambiguous or indefinite about the "maximum measuring range" as now defined.

The objection raised with regard to the "values" set forth in Claim 3 is not understood. That claim did not recite "first" and "second" values. In any event, the language of Claims 3 and 18 have been appropriately modified to eliminate any reasonable question.

The objection to "burn out" in Claims 12 and 22 is not well taken. That term is specifically defined at page 17, lines 7 – 11 and page 18, lines 13-14 of the Specification in a manner consistent with common usage in the art.

Likewise, the objection to "predetermined value" in Claims 13 and 23 is not well taken in light of that term's definition on page 19, lines 10-11 of the Specification. Moreover, the question of "how" a value is calculated is not a reason to reject a claim under the second paragraph of Section 112. The manner as to how something is accomplished is the province of the disclosure which in this case is ample as viewed through the eyes of one of ordinary skill.

Reconsideration of the rejection of Claims 1-33 as being anticipated by Suzuki et al. under 35 U.S.C. § 102(b), which rejection is traversed is requested on grounds that the Office Action completely fails to establish a prima facie case based on substantial record evidence and a reasonable reading of the Suzuki et

al. patent. In connection with the latter point, attention is directed to the remarks found in the Reply filed May 21, 2002. That discussion alone is deemed sufficient to distinguish the present invention over the prior art as was subsequently reflected in the Interview Summary of July 18, 2002 where agreement was reached. A major point of distinction is that the exothermic and temperature-compensation resistors 7A and 7B of the Suzuki et al. arrangement for controlling the temperature of the exothermic resistor do not and cannot control the applied voltage to the resistor film when measuring the maximum measuring range of an air flow rate within the suction pipe when a liquid droplet has not been deposited onto the resistor film or the supply current is controlled to be smaller than a current flowing in the resistor film at the time of measuring the aforesaid maximum measuring range.

The Suzuki et al. patent relates to a hot film type air flow meter in which a thin film resistor (the air flow rate detecting resistance element 6A, 6B of Fig. 1b) is formed on a dielectric material substrate of an almost 10mm X 5 mm size. Electromagnetic coupling is likely to occur as a result. Thus, in order to prevent radio interference due to the electromagnetic coupling, a shield electrode resistance element forming a grounded thin film type conductor 7A, 7B surrounds the thin film resistor.

The present invention mainly prevents the "burn-out" phenomenon which occurs when the voltage applied to the bridge is large and a waterdrop is deposited on the surface of the exothermic resistor. An air layer is partially formed on the surface of the exothermic resistor so that the temperature of the

air layer increases above 100°C which is the upper limit of the water temperature. Thereby, the exothermic resistor would become overheated with its consequent breakage or deterioration. Limiting the applied voltage or the supplied current to prevent such a burn-out phenomenon would disadvantageously limit the maximum measuring range of an air flow rate (i.e., a maximum air flow rate) in the normal state.

Applicants further recognized that if the exothermic resistor is provided on a thicker portion, the aforesaid deterioration or breakage of the resistor might be prevented but the thermal responsibility of the resistor will be deteriorated. Applicants overcome this problem such that, in the case where a liquid droplet is deposited on the exothermic resistor, the applied voltage or the supplied current thereto is limited or controlled so as to suppress the occurrence of the burn-out, etc. More specifically, where a liquid droplet is deposited on the resistor film, the applied voltage is controlled to a value smaller than a voltage which is applied to the resistor film at the time of measuring a maximum measuring range of an air flow rate within the suction pipe in the case where a liquid droplet is not deposited onto the resistor film, or the supply current is controlled to a value smaller than a current flowing in the resistor film at the time of measuring a maximum measuring range of an air flow rate within the suction pipe in the case where a liquid droplet is not deposited onto the resistor film.

As a result, the measurement reliability or the deterioration or breakage of the resistor in the case where a liquid droplet is deposited on the exothermic

resistor can now be prevented. No such teaching or recognition is found in the Suzuki et al. patent.

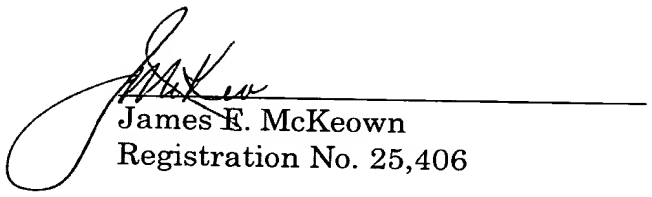
Accordingly, early and favorable action upon Claims 1-33 is now earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #381AS/49211).

Respectfully submitted,

March 24, 2003



James E. McKeown
Registration No. 25,406

CROWELL & MORING, LLP
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
CAM No. 056203.49211